

1. A data source, comprising:

```
a data buffer storing said data packets;
```

a FIFO storing said predetermined addresses in a first-in first-out mode; and

data sending means that upon receiving start instructions from said data converting means, refers to said predetermined address to which reference is not made yet in said FIFO, fetches data packets corresponding to said descriptor from said data buffer in accordance with a method of sending said descriptor indicated by said predetermined address, generates a send packet from said data packet and outputs the same, and sends an end-of-send notice to said data converting means when the output of said send packet is ended,

the number of said predetermined addresses to be stored in said FIFO being N (N: larger than or equal to 1 and smaller than the total number of said descriptors).

2. The data source according to claim 1, wherein said data converting means newly stores predetermined addresses in said

FIFO only when the number of said predetermined addresses is smaller than N; and

when N of predetermined addresses are already stored in said FIFO, waits until said end-of-send notice is received,

upon receiving said end-of-send notice, fetches said predetermined address from said FIFO and discards it, and then

when there exists a non-storage descriptor not storing yet predetermined address in said FIFO on said descriptor list, stores said non-storage descriptor in said FIFO.

3. The data source according to claim 2, wherein said data converting means, when M of said end-of send notices arrive (M is fixed or variable), fetches M of said second addresses in a batch from said FIFO and discards them.

4. The data source according to claim 2 or 3, wherein said data sending means is an IEEE 1394 interface and said send packet is an isochronous packet in IEEE 1394.

5. The data source according to claim 4, wherein said data packet is a common isochronous packet in IEC 61883.

6. A data conversion device outputting data in response to a file read request, comprising:

request analyzing means for analyzing said read request composed of at least an offset position from the front-end of said file and the size of data to be read; and

0054300 101300

selecting means for selecting and outputting predetermined data in accordance with instructions from said request analyzing means.

7. The data conversion device according to claim 6, wherein said file is an avi format file,

said request analyzing means analyzes which portion of header information, index information, video data and audio data is requested, and

said selecting means selects each data that is placed on a predetermined position based on the result of said request analyzing means, and rearranges the data in accordance with the avi format and outputs the same.

8. The data conversion device according to claim 7, wherein said request analyzing means, when video data is requested, controls recording/regenerating means in which said video data is recorded so that said video data can be obtained.

9. An auxiliary data file generation device generating header information of an avi format file as a header file and index information as an index file, comprising:

stream data analyzing means for analyzing stream data to be inputted and extracting information needed for generating said header information and said index information;

request analyzing means for providing control so that data to be recorded in a recorder from said write request composed of at least an offset position from the front-end of said file, the size of data to be written and write data

14. An auxiliary data file generation device generating header information of a avi format file as a header file, and index information as an index file, comprising:

16. A data conversion method, wherein which portion of header information, index information, video data and audio data is requested by the read request of said file composed of at least an offset position from the front-end of an avi format file and the size of data to be read is analyzed, and

each data that is placed in a predetermined position is read, and data that is rearranged to the avi format is obtained, based on the result of the analysis.

23. The auxiliary data file generation method according to claim 22, wherein audio data based on the avi format is extracted from said write request, is converted to a predetermined format, and is saved as a file.

in the case where said data sink is a personal computer having an IEEE 1394 interface and device controlling means for controlling all or part of devices connected to said IEEE 1394 bus,

in the case where said data source outputs said output data to said IEEE 1394 bus using broadcast transmission,

25. The reception method according to claim 24, wherein said .
data source has an output control register,

said output control register includes a flag indicating whether broadcast transmission is performed and a channel number indicating which channel said output data is outputted to, and

in the case where said data sink is said personal computer,

said data sink changes said channel number to an arbitrary value N (N is a integer between 0 and 63), followed by receiving said output data from a channel whose channel number is said N.

in the case where said data sink is said personal computer,

28. The reception method according to any one of claims 25 to 27, wherein a second data sink conforming to IEC 61883 is connected to said IEEE 1394 bus, and

in the case where said data sink is said personal computer,

29. The reception method according to any one of claims 24 to 28, wherein said data source is a digital VCR for use at ~~home.~~

31. A medium carrying a program and/or data for having all or part of functions of all or part of means of the data source, the data conversion device, the auxiliary data file generation device or the data inverse conversion device according to any one of claims 1 to 30 executed by the computer, wherein said medium can be processed by the computer.

32. An information aggregate, wherein said information aggregate is a program and/or data for having all or part of functions of all or part of means of the data source, the data conversion device, auxiliary data file generation device or the data inverse conversion device according to any one of claims 1 to 30 executed by the computer.

33. A medium that carries a program and/or data for having all or part of operations of all or part of steps of the data conversion method, the auxiliary data file generation method, the data inverse conversion method or the reception method according to any one of claims 1 to 30 executed by the computer, wherein said medium can be processed by the computer.

34. An information aggregate wherein said information aggregate is a program and/or data for having all or part of operations of all or part of steps of the data conversion

method, the auxiliary data file generation method, the data inverse conversion method or the reception method according to any one of claims 1 to 30 executed by the computer.